

## Safety Data Sheet

100940092

Safety Data Sheet version 1 last revised 12/12/2017, print date 19/2/2018

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Substance identification:

Trade name:

ORANGE OIL BRAS. PERA COLD PRESSED

Trade code: 100940092

CAS number: 8028-48-6

EC number: 232-433-8

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Raw Material for use in flavours, fragrances and similar products

Uses advised against: Not for personal use at this concentration nor in this format

#### 1.3. Details of the supplier of the safety data sheet

#### 1.4. Emergency telephone number

### SECTION 2: Hazards identification



#### 2.1. Classification of the substance or mixture

##### Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 3	Flammable liquid and vapour.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1	May cause an allergic skin reaction.
Asp. Tox. 1	May be fatal if swallowed and enters airways.
Aquatic Chronic 1	Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

#### 2.2. Label elements

##### Regulation (EC) No 1272/2008 (CLP):

##### Pictograms and Signal Words



Danger

##### Hazard statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.

##### Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilation/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash contact areas thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific measures (see supplemental first aid instructions on this label or in the SDS).
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use dry chemical, foam or CO2 for extinction.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with all applicable regulations.

#### Special Provisions:

EUH208	Contains Linalool. May produce an allergic reaction.
EUH208	Contains citral. May produce an allergic reaction.

#### Contains

(R)-p-Mentha-1,8-diene

#### Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

No PBT Ingredients are present

Other Hazards: No other hazards

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Chemical characterisation: Citrus sinensis (L.) Pers.

CAS number: 8028-48-6

EC number: 232-433-8

#### Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
90-100 %	(R)-p-Mentha-1,8-diene	CAS:5989-27-5 EC:227-813-5	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 1, H226, H304, H315, H317, H410, M:1	01-2119529223-47-XXXX
0.25-0.5 %	Linalool	CAS:78-70-6 EC:201-134-4	Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1B, H315, H319, H317	01-2119474016-42-XXXX
0.1-0.25 %	citral	CAS:5392-40-5 EC:226-394-6	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2, H315, H317, H319	01-2119462829-23-XXXX

### 3.2. Mixtures

Not determined

See section 16 for full text of H- phrases, if present above.

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing and shoes.
- Immediately remove any contaminated clothing, shoes or stockings.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eye contact:

- Wash immediately and thoroughly with running water, keeping eyelids regularly raised, for at least 15 minutes. Cold water may be used. Check for and remove any contact lenses at once. OBTAIN A MEDICAL EXAMINATION.
- Protect the eyes with a sterile gauze or a clean, dry handkerchief.

In case of ingestion:

- Do not induce vomiting. Seek immediate medical attention and provide SDS to medical provider.

In case of inhalation:

- Remove exposed person to fresh air and keep warm and at rest.

### **4.2. Most important symptoms and effects, both acute and delayed**

Eye irritation  
Eye damage  
Skin irritation  
Erythema

### **4.3. Indication of any immediate medical attention and special treatment needed**

In case of accident or exposure, seek immediate medical attention and provide SDS to medical provider.

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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

Suitable extinguishing media:

- CO2 or dry chemical fire extinguishers.

Unsuitable extinguishing media:

- None identified

### **5.2. Special hazards arising from the substance or mixture**

- Do not inhale explosion or combustion gases.
- Burning produces heavy smoke.

### **5.3. Advice for firefighters**

- Use suitable breathing apparatus.
  - Collect contaminated fire extinguishing water. Do not discharge into drains.
  - Move undamaged containers from immediate hazard area but only if it can be done safely.
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## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

- Wear personal protective equipment.
- Remove all sources of ignition.
- Remove exposed persons to safety.
- See protective measures under points 7 and 8.

### **6.2. Environmental precautions**

- Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
- Retain contaminated washing water and dispose of it following local legislation.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities if required.
- Suitable material for taking up: dry and inert absorbing material (e.g. vermiculite, sand, earth).

### **6.3. Methods and material for containment and cleaning up**

- Suitable material for taking up: dry and inert absorbing material (e.g. vermiculite, sand, earth).
- Wash with plenty of water.

### **6.4. Reference to other sections**

- See also section 8 and 13.
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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

- Avoid contact with skin and eyes, inhalation of vapors and mists.
- Clean empty container before re-using.
- Before conducting transfer operations, assure that there aren't any incompatible material residuals in the receiving container.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.
- See also section 8 for recommended personal protective equipment.

## 7.2. Conditions for safe storage, including any incompatibilities

Closed recipients, away from the light, in a cool, dry place (optimum storage temperature between 10°C and 25°C). Shake before using.

Always keep in a well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from flame and sparks. Avoid accumulating electrostatic charge.

Incompatible materials:

None identified

Instructions regarding storage premises:

Cool and adequately ventilated.

Safety electric system.

## 7.3. Specific end use(s)

Recommendation(s)

None in particular.

Industrial sector specific solutions:

None in particular.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational Exposure Limits (OEL)

Component	OEL Type	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour
citral	ACGIH		5			

### 8.2. Exposure controls

Eye/face protection:

Use close-fitting safety goggles (standard safety glasses are not adequate).

Skin protection:

Use clothing that provides comprehensive protection to the skin; e.g., cotton, rubber, PVC, or viton.

Hand protection:

Use protective gloves that provide comprehensive protection; e.g., PVC, neoprene, or rubber.

Respiratory protection:

Not determined

Hygienic and Technical measures

Not determined

Thermal Hazards:

No Data Available

Environmental exposure controls:

No Data Available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance: Mobile liquid, Yellowish to brownish (Visual)

Odor: Sweet Aldehydic Orange (Organoleptic)

Odor threshold: Not relevant (Organoleptic)

pH: Not determined (pH meter)

Melting point/ range: Not relevant

Boiling point/ range: Not relevant (OECD GUIDELINE 103)

Flash point: 50 °C (122 °F) (Pensky-Martens Closed Cup Test (ASTM D93))

Evaporation rate: Not determined (Shell Thin-Film Evaporometer ASTM D3539 - 87(2004) )

Upper/lower flammability or explosive limits: Not relevant (ASTM E681-09)

Vapor density: Not relevant (Calculation)

Vapor pressure: Not relevant (ASTM D5190 - 07 for Petroleum Products)

Density: 0.85 g/cm3 (OECD GUIDELINE 109)

Water solubility: Not determined (OECD GUIDELINE 105)

Lipid solubility: Not determined (OECD GUIDELINE 105)

Partition coefficient (n-octanol/water): Not relevant (OECD GUIDELINE 123 Slow-Stirring Method)

Auto-ignition temperature: Not relevant (ASTM E659 Method for Liquid Chemicals.)

Decomposition temperature: Not relevant (Time Pressure Test Vessel)

Viscosity: Not relevant (OECD GUIDELINE 114)

Explosive properties: Not relevant (UN Test 3(a)ii BAM Fallhammer)

Oxidizing properties: Not relevant (Oxidizing Liquids Test Chamber)  
Flammability (Solid, Gas): Not relevant (ASTM Method E681-94.)  
Volatile Organic compounds - VOCs = Not determined

## 9.2. Other information

Substance group relevant properties: Not relevant  
Miscibility: Not determined  
Conductivity: Not relevant (Conductivity meter)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May generate dangerous reactions (see subsections below).

### 10.2. Chemical stability

May generate dangerous reactions (see subsections below).

### 10.3. Possibility of hazardous reactions

Burning produces carbon monoxide and/or carbon dioxide.

### 10.4. Conditions to avoid

Avoid accumulating electrostatic charge.

### 10.5. Incompatible materials

Avoid contact with combustible materials -- Product could catch fire.

### 10.6. Hazardous decomposition products

Data not available.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicological information on main components of the mixture:

(R)-p-Mentha-1,8-diene	LD50 Oral Rat = 5200 mg/kg LD50 Skin Rabbit > 5 g/kg
Linalool	LD50 Oral Rat = 2790 mg/kg LC50 Inhalation Mouse = 3.2 mg/l 1h
citral	LD50 Oral Rat = 4960 mg/kg LD50 Skin Rabbit = 2250 mg/kg

## SECTION 12: Ecological information

### 12.1. Toxicity

Adopt good working practices so that the product is not released into the environment.

Eco-toxicity:

Very toxic to aquatic life with long lasting effects.

#### List of Eco-Toxicological properties of the components

Quantity	Component	Ident. Numb.	Ecotox Data
90-100 %	(R)-p-Mentha-1,8-diene	CAS: 5989-27-5 - 67-548-EC: 227-813-5	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 0.619 mg/l 96h EPA - 0.619 - 0.796 flow-through  a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 35 mg/l 96h EPA
0.25-0.5 %	Linalool	CAS: 78-70-6 - 67-548-EC: 201-134-4	a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 20 mg/l 48h IUCLID  a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 88.3 mg/l 96h IUCLID
0.1-0.25 %	citral	CAS: 5392-40-5 - 67-548-EC: 226-394-6	a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 7 mg/l 48h IUCLID  a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 16 mg/l 72h IUCLID

### 12.2. Persistence and degradability

Not determined

### 12.3. Bioaccumulative potential

Not determined

#### 12.4. Mobility in soil

Not determined

#### 12.5. Results of PBT and vPvB assessment

No PBT Ingredients are present

#### 12.6. Other adverse effects

Not determined

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Residues and packaging residues will be handled according to local (Environmental Quality Management Law 7/2007), estate (Waste management Law 10/1998) and European (Directive 2008/98/EC on waste management and recycling) regulations.

Water Hazard Class Class 3: extremely hazardous.

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### SECTION 14: Transport information

#### 14.1. UN number

1169

#### 14.2. UN proper shipping name

ADR-Shipping Name: EXTRACTS, AROMATIC, LIQUID

IATA-Technical name: EXTRACTS, AROMATIC, LIQUID

IMDG-Technical name: EXTRACTS, AROMATIC, LIQUID

#### 14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

#### 14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

#### 14.5. Environmental hazards

Toxic Component most present: Limonene

Toxic Ingredients Qty: 0.00

High Toxicity Ingredients Qty: 97.00

Environmental Pollutant: Yes

#### 14.6. Special precautions for user

Road and Rail (ADR-RID):

Exempted for ADR: No

ADR-Label: 3

ADR-Upper number: 30

ADR-Special Provisions: 601 640E

ADR-Transport category (Tunnel restriction code): 3 (D/E)

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Sub Risk: -

IATA-Erg: 3L

IATA-Special Provisioning: A3

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Sub Risk: -

IMDG-Special Provisioning: 223 955

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-E, S-D

IMDG-MFAG: N/A

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU)2015/830

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: None

Provisions related to directive EU 2012/18 (Seveso III):

**Seveso III category according to Annex 1, part 1**

	<b>Lower-tier threshold (tonnes)</b>	<b>Upper-tier threshold (tonnes)</b>
Product belongs to category: P5c	5000	50000
Product belongs to category: E1	100	200

German Water Hazard Class.

Class 3: extremely hazardous.

SVHC Substances:

Not Applicable

**15.2. Chemical safety assessment**

Chemical Safety Assessment: No

**SECTION 16: Other information**

<b>Code</b>	<b>Description</b>
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.

<b>Code</b>	<b>Hazard class and hazard category</b>	<b>Description</b>
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

In December 2003, the National Institute for Occupational Safety and Health

(NIOSH) published an Alert on preventing lung disease among workers who use or make flavorings. NIOSH Publication Number 2004-110. In August 2004, the United States Flavor and Extract Manufacturers Association (FEMA) issued a

report entitled "Respiratory Safety in the Flavoring Manufacturing

Workplace." Both of these reports provide recommendations for reducing employee exposure and for medical surveillance in the workplace. The recommendations in these reports are generally applicable to the use of any chemical in the workplace and you are strongly urged to review both of these reports.

Both these reports provide recommendations for reducing employee exposure and for medical surveillance in the workplace. The contents in these reports are generally applicable to the use of any material in the workplace, and it is recommended that they be reviewed.

Advice on training: the user should be trained to handle the mixture / substances with respect to:

Possible hazards. See section 2.

Appropriate personal protective clothing. See section 8.

Appropriate engineering controls including the use of extraction equipment. See section 8.

First aid measures. See section 4.

Fire-fighting measures. See section 5.

Handling spillages. See section 13.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society)

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA)

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

IMDG: International Maritime Code for Dangerous Goods

INCI: International Nomenclature of Cosmetic Ingredients

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: KAFH

KSt: Explosion coefficient

LC50: Lethal concentration, for 50 percent of test population

LD50: Lethal dose, for 50 percent of test population

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable



N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail

STEL: Short Term Exposure limit

STOT: Specific Target Organ Toxicity

TLV: Threshold Limiting Value

TWATLV: Threshold Limiting Value for the Time Weighted Average 8 hour day.(ACGIH Standard)

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class